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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 09/782,329 | 02/13/2001 | Mitchell Kriegman | F.11152 | 9809 |
| 27957 | 7590 | 12/18/2002 | EXAMINER | |
| LIEBERMAN & NOWAK LLP 350 FIFTH AVE. SUITE 7412 NEW YORK, NY 10118 | | | TRAN, TRANG U | |
| | | ART UNIT | PAPER NUMBER | |
| | | 2614 | | |
| DATE MAILED: 12/18/2002 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|---------------------------|--------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 09/782,329 | KRIEGMAN, MITCHELL | |
| | Examiner Trang U. Tran | Art Unit 2614 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on _____.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-11 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
 5) Claim(s) ____ is/are allowed.
 6) Claim(s) 1-11 is/are rejected.
 7) Claim(s) ____ is/are objected to.
 8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on ____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 11) The proposed drawing correction filed on ____ is: a) approved b) disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) The translation of the foreign language provisional application has been received.
 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

| | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tzidon et al. (US Patent No. 5,737,031) in view of Bunin (US Patent No. 3,070,920).

In considering claim 1, Tzidon et al discloses all the claimed subject matter, note 1) the claimed a virtual production set, including a key-colored background screen, a stage and at least one action puppet character manipulated by puppeteers on said virtual production set is met by the virtual set database and the keyer foreground of Fig. 2 (col. 3, line 30 to col. 4, line16), 2) the claimed at least two cameras, each of said cameras being positioned relative an action puppet character to record an action image of said puppet character on said virtual production set from a different camera angle is met by the main camera and the shadow camera (Figs. 2 and 3, col. 4, line 19 to col. 5, line 45), 3) the claimed means for compositing of each of said images from each of said cameras with a virtual image or a digitally created back plate is met by picture processing, adding shadow to background 111 (Figs. 2-5, col. 4, lines 18-53), and 4) the claimed means for compositing of each of said composited images in a multiple composite image is met by the combined image 113 (Figs. 2-5, col. 4, lines 18-53).

However, Tzidon et al explicitly does not discloses the claimed at least one action puppet character manipulated by puppeteers on said virtual production set.

Bunin teaches that in Fig. 1, separate control rods 11 are attached to the head, stomach and arms of primary form 10. Animation of the human figure show is achieved by manipulation of the remote ends of the rods. The rods are sufficiently long to extend outside the field of view such as to locations behind a curtain so that the operators are hidden (col. 2, line 25 to col. 4, line 65).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the one action puppet character manipulated by puppeteers as taught by Bunin into Tzidon et al's system in order to produce continuous motion animated characterizations for direct viewing and for motion picture photography and television.

In considering claim 2, the claimed wherein said system comprises two cameras, wherein one of said cameras records an action image of said puppet character from a master camera angle, relative to said virtual studio set, and the other of said cameras records an action image of said puppet character from a different camera angle, relative to said virtual studio set is met by the main camera and the shadow camera (Figs. 2 and 3, col. 4, line 19 to col. 5, line 45) of Tzidon et al.

In considering claim 3, the claimed wherein each of said composite images of each of said puppet action characters is integrated within the same image frame so as to provide complimentary action images of each of said puppet characters relative to

one another is met by the combined image 113 (Figs. 2-5, col. 4, lines 18-53) of Tzidon et al.

In considering claim 4, the claimed wherein said composite images are integrated by separate compositing modules, so that each composited image appears within an allocated portion of a given image frame, and each allocated portion of said the image frame is adjusted relative to one another to create depth and/or perspective of one composited image relative to the other is met by the picture processing 111 and the combined image 113 (Figs. 2-5, col. 4, lines 18-53) of Tzidon et al.

In considering claim 5, the claimed wherein each allocated portion of said the image frame is adjusted relative to one another to create interaction and/or complimentary action of one puppet character from one composited image with another puppet character from another composited image with a given image frame is met by the picture processing 111 and the combined image 113 (Figs. 2-5, col. 4, lines 18-53) of Tzidon et al.

Claim 6 is rejected for the same reason as discussed in claim 1.

In considering claim 7, the claimed wherein said recording step B comprised comprising recording an action image of said puppet character, on two different cameras, at the same time is met by the main camera and the shadow camera (Figs. 2 and 3, col. 4, line 19 to col. 5, line 45) of Tzidon et al.

Claims 8-11 are rejected for the same reason as discussed in claims 2-5, respectively.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Spector (US Patent No. 5,923,400) discloses real-time film animation technique.

Bunin (US Patent No. 3,899,848) discloses animated cartoon character and method.

Fischer et al. (US Patent No. 5,790,124) disclose system and method for allowing a performer to control and interact with an on-stage display device.

Mitsui et al. (US Patent No. 6,034,740) disclose keying system and composite image producing method.

Faroudja (US Patent No. 5,029,997) discloses stop-frame animation system.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Trang U. Tran** whose telephone number is **(703) 305-0090**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **John W. Miller**, can be reached at **(703) 305-4795**.

Any response to this action should be mailed to:

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Washington, D.C. 20231

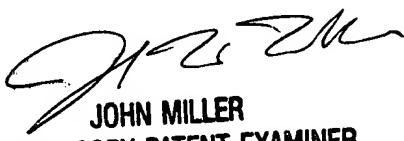
or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

TT TT
December 4, 2002



JOHN MILLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600